



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/056,546	01/24/2002	Sankar Basu	YOR920020018	8796
48813	7590	07/08/2008		
LAW OFFICE OF IDO TUCHMAN (YOR)			EXAMINER	
ECM #72212			DEBROW, JAMES J	
PO Box 4668			ART UNIT	
New York, NY 10163-4668			PAPER NUMBER	
			2176	
			NOTIFICATION DATE	
			DELIVERY MODE	
			07/08/2008	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pair@tuchmanlaw.com
idotuchman@gmail.com

Office Action Summary

Application No.

10/056,546

Applicant(s)

BASU ET AL.

Examiner

JAMES J. DEBROW

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5-15, 23, 24 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-15, 23, 24 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/888)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is responsive to communications: RCEX filed 01 May 2008.

Claims 1, 2, 5-15, 23, 24 and 29-31 are pending in this case. Claim 1 is an independent claim.

Applicant's Response

In Applicant's response dated 01 May 2008, Applicant amended claims 1, 5, 6, 9, 12 and 15; canceled claims 16, 17, 20-22 and 25-28; added new claims 29-31; argued against all objections and rejection previously set forth in previous Office Action.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 01 May 2008 has been entered.

Claim Objections

Claim 13 is objected to because of the following informalities: The claims recites "*The method of claim 1, wherein the determination of the propagation of annotation is made.....*" Claim 1 does not disclose a step of determination of the propagation of annotation. Claim 1 simply discloses "*propagating said input annotation.....*" Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stubler et al. (Patent No.: US 6,804,684, B2; Filed May 7, 2001) (hereinafter "Stubler") in view of LeBrun et al. (Patent No.: 6,043,819; Filed Jul. 01, 1997) (hereinafter "LeBrun"), further in view of Neal et al. (Patent No.: US 6,697,799 B1; Effective Filing Date: Sep. 10, 1999) (hereinafter "Neal").

In regards to independent claim 1 Stubler discloses *method for generating persistent annotations of multimedia content, comprising one or more repetitions of the following steps:*

actively selecting examples of multimedia content to be annotated by a user (fig. 2, fig. 6-7, col. 3 line 46 – col. 4 line 12, col. 8 lines 18-23, and col. 9 line 65 – col. 10 line 18; col. 11, lines 3-35; Stubler discloses unlabeled image regions being presented to the user so that the user can apply a caption or label to all of the regions simultaneously. Stubler also disclose automatically generating one or more captions or labels for the acquired image automatically without any user intervention.).

accepting input annotations from said user for said selected examples (fig. 2, col. 3 line 46 – col. 4 line 12, and col. 8 lines 18-55; Stubler discloses unlabeled image regions being presented to the user so that the user can apply a caption or label to all of the regions simultaneously.).

propagating said input annotations to other instances of multimedia content (fig. 2; col. 3 line 46 – col. 4 line 12; col. 8 lines 18-55; col. 2 line 59 – col. 3 line 10; Stubler discloses unlabeled image regions being presented to the user so that the user can apply a caption or label to all of the regions simultaneously.).

storing said input annotations and said propagated annotations (col. 8 lines 18-55).

Stubler does not expressly disclose *actively selecting examples of multimedia content to be annotated by a user, wherein the examples of multimedia content are selected based on at least one criterion for achieving a maximal disambiguation result such that only those examples which are most ambiguous are selected, the at least one criterion including a quantitative measure of confidence in a label.*

However LeBrun teaches *actively selecting examples of multimedia content to be annotated by a user, wherein the examples of multimedia content are selected based on at least one criterion for achieving a maximal disambiguation result such that only those examples which are most ambiguous are selected* (col. 3, lines 49-51; col. 10, lines 4-8; col. 18, lines 16-20; col. 21, lines 20-24; LeBrun teaches a database of graphic document images which are automatically identified (*annotated*) by an image character reader. Images not automatically identified (*annotated*) by the image character reader are queued for manual identification/classification by human operators looking sequentially at a screen or queue of images and keying in the identification.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Stubler with LeBrun for the benefit of speeding up the process of document (*multimedia annotations*) processing so that a higher volume of transactions can be processed, and reduce the number of errors which are considered to be inherent in a document processing (*multimedia annotations*) operation (col. 3, lines 14-23).

Neal teaches *the at least one criterion including a quantitative measure of confidence in a label* (col. 11, lines 1-61; Neal teaches a classification confidence score which determines the level of confidence in which a category is likely to be correct during classification. If the item has a high confidence, then it can be classified directly. If the confidence level is low, then the results can be sent to the user interface for

review and selection by the operator. Neal further teaches comparing the confidence score to a threshold to determine whether or not to automatically classify an item. Using the broadest reasonable interpretation, the Examiner has determined that the “confidence score” being compared to a threshold value as taught by Neal is analogous to at least one criterion including a quantitative measure of confidence in a label of the current invention.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Stubler and LeBrun with Neal for the benefit of comparing confidence scores of items for all selected classifications and classifying the items based on confidence score comparison (col. 2, lines 36-42).

In regards to dependent claim 6, Stubler discloses *wherein the multimedia content comprises one or more types selected from the group consisting of: audio, video, Web pages, time series data, surveillance data, sensor data, and XML data* (col. 3 line 46 – col. 4 line 12; Stubler discloses images type multimedia. Using the broadest reasonable interpretation, the Examiner concludes surveillance data to include but not be limited to images.).

In regards to dependent claim 10, Stubler discloses *the method of claim 1, wherein the input annotations are created by means of steps selected from the group consisting of: creating new annotations, deleting existing annotations, rejecting proposed annotations, and modifying annotations* (col. 9, line 65-col. 10, line 18; Stubler

Art Unit: 2176

disclose an interactive user verification stage in which the user may select and/or edit captions and label.).

In regards to dependent claim 23, Stubler in view of LeBrun does not expressly disclose *wherein the at least one criterion includes an ambiguity level of the selected examples*.

However Neal teaches *wherein the at least one criterion includes an ambiguity level of the selected examples* (col. 11, lines 1-47; Neal teaches a classification confidence score which determines the level of confidence in which a category is likely to be correct during classification. If the item has a high confidence, then it can be classified directly. If the confidence level is low, then the results can be sent to the user interface for review and selection by the operator. Using the broadest reasonable interpretation, the Examiner has determined that the “confidence level” as taught by Neal is analogous with the “ambiguity level” of the current invention.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Stubler and LeBrun with Neal for the benefit of comparing confidence scores of items for all selected classifications and classifying the items based on confidence score comparison (col. 2, lines 36-42).

Note

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to

be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Claims 2, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stubler and LeBrun in view of Neal, further in view of Lennon et al. (Patent No.: 6,718,063 B1; Filed Dec. 10, 1999) (hereinafter “Lennon”).

In regards to dependent claim 2, Stubler discloses *wherein the step of actively selecting is performed using a selection technique selected from deterministic* (col. 4 line 64 – col. 5 line 19).

Stubler and LeBrun in view of Neal does not expressly disclose *actively selecting is performed using a selection technique of probabilistic*.

However Lennon teaches *actively selecting is performed using a selection technique of probabilistic* (col. 3, lines 19-35; Lennon teaches using a probabilistic method for correctly assigning labels to regions of images.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lennon with Stubler and LeBrun in view of Neal for the benefit of using a probabilistic method, which results in each assigned label for a region having an associated probability or likelihood of the label being correctly assigned (col. 3, lines 23-27).

In regards to dependent claim 5, Stubler and LeBrun in view of Neal does not expressly disclose *wherein an optimization criterion for active selection includes one or more criteria selected from the group consisting of: information measures*.

However Lennon teaches *wherein an optimization criterion for active selection includes one or more criteria selected from the group consisting of: information measures* (col. 3, lines 34-36; col. 3, line 63-col. 4, line 4; Lennon teaches comparing the distance metric with a predetermined threshold in order to determine the similarity of the images. Thus Lennon teaches active selection includes one or more criteria selected from the group consisting of: information measures, using distance and threshold measures.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lennon with Stubler and LeBrun in view of Neal for the benefit of using a probabilistic method, which results in each assigned label for a region having an associated probability or likelihood of the label being correctly assigned (col. 3, lines 23-27).

Note

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Claims 7, 8, 11, 13-15 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stubler and LeBrun in view of Neal, further in view of Lipson et al. (Patent No.: 5,963,670; Filed: Feb. 12, 1996) (hereinafter "Lipson").

In regards to dependent claim 7, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 1, wherein the input annotations are created by a user with reference to a vocabulary.*

However Lipson teaches *the method of claim 1, wherein the input annotations are created by a user with reference to a vocabulary* (col. 9, lines 23-35; Lipson teaches a rich vocabulary to differentiate between many classes of images.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 8, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 7, wherein the vocabulary contains one or more items selected from the group consisting of: terms, concepts, labels, and annotations.*

However Lipson teaches *the method of claim 7, wherein the vocabulary contains one or more items selected from the group consisting of: terms, concepts, labels, and annotations* (col. 9, lines 23-42; Lipson teaches a rich vocabulary to differentiate

between many classes of images. It has been established and is commonly known that vocabularies typically contain *terms and concepts*.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 11, Stubler and LeBrun in view of Neal does not expressly disclose the method of claim 7, wherein the vocabulary is adaptively or dynamically organized and/or limited by the system or the user.

However Lipson teaches *the method of claim 7, wherein the vocabulary is adaptively or dynamically organized and/or limited by the system or the user* (col. 9, lines 23-35.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 13, Stubler discloses *the method of claim 1, wherein the determination of the propagation of annotations is made deterministically or probabilistically* (col. 4 line 64 – col. 5 line 19)

Stubler and LeBrun in view of Neal does not expressly disclose *the use of models for each annotation or for joint annotations.*

However Lipson teaches *the use of models for each annotation or for joint annotations* (col. 2, lines 56-59; Lipson teaches an image model for classifying or detecting images.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 14, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 13, wherein the models are created or learned automatically or semi-automatically and/or are updated adaptively from interaction with the user.*

However Lipson teaches *wherein the models are created or learned automatically or semi-automatically and/or are updated adaptively from interaction with the user* (col. 9, line 37-col. 10, line 22; Lipson teaches a method for generating a class model.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 15, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 13, wherein the models are based on nearest neighbor voting or variants, parametric or statistical models, expert systems, rule-based systems, or hybrid techniques.*

However Lipson teaches *wherein the models are based on nearest neighbor voting or variants* (col. 2, lines 56-59; col. 13, line 2-col. 14, line18).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 29, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 13, wherein the models are based on expert systems.*

However Lipson teaches *wherein the models are based on expert systems* (col. 8, lines 53-60; Lipson teaches a model in which a user has personal knowledge of relevant relative relationship for a given class of images. Thus Lipson teaches wherein the models are based on expert systems.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the

benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 30, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 13, wherein the models are based on rule-based systems*.

However Lipson teaches *wherein the models are based on rule-based systems* (col. 3, lines 29-35; col. 17, lines 10-42; Lipson teaches deformable image template models. Is has been established and is well known in the art that template are rule-based.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

In regards to dependent claim 31, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 13, wherein the models are based on hybrid techniques*.

However Lipson teaches *wherein the models are based on hybrid techniques* (col. 2, lines 42-54; col. 13, line 56-col. 14, line 18; Lipson teaches a model which is

Art Unit: 2176

provided from spatial and photometric properties of an image. Thus Lipson teaches models are based on hybrid techniques, a combination of models/relationships.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Lipson with Stubler and LeBrun in view of Neal for the benefit of providing a class model, which can be used to detect images of that class in a database (col. 2, lines 39-41).

Note

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stubler and LeBrun in view of Neal, further in view of Chino et al. (Patent No.: 6,118,888; Filed: Feb. 25, 1998) (hereinafter “Chino”).

In regards to dependent claim 9, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 1, wherein the process of creating input annotations by the user involves multimodal interaction with the user.*

However Chino teaches *wherein the process of creating input annotations by the user involves multimodal interaction with the user* (col. 3, lines 17-65; col. 30, lines 13-15; Chino teaches creating input annotations by the user involves multimodal interaction with the user.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Chino with Stubler and LeBrun in view of Neal for the benefit of providing a multimodal interface apparatus and method to smoothly communicate between the user and the apparatus using the user's gaze object (col. 3, lines 17-20).

In regards to dependent claim 12, Stubler and LeBrun in view of Neal does not expressly disclose *the method of claim 9, wherein the multimodal interaction involves one or more elements selected from the group consisting of: gaze detection, finger pointing, expression detection, and effective computing methods for sensing a user's state.*

However Chino teaches *wherein the multimodal interaction involves one or more elements selected from the group consisting of: gaze detection, finger pointing, expression detection, and effective computing methods for sensing a user's state* (Abstract; col. 17, lines 14-58; Chino teaches a multimodal interface which obtains position information of the objected pointed to by the gesture input, the user's face or hand moved by the gesture input.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Chino with Stubler and LeBrun in view of Neal for the benefit of providing a multimodal interface apparatus and method to smoothly communicate between the user and the apparatus using the user's gaze object (col. 3, lines 17-20).

Note

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stubler and LeBrun in view of Neal, further in view of Toyama (Patent No.: US 6,816,847 B1; Filing Date: Sep. 23, 1999).

In regards to dependent claim 24, Stubler in view of LeBrun does not expressly disclose *wherein the at least one criterion includes a confidence level of the selected examples, the confidence level being inversely proportional to a distance of a new feature of the selected examples from a separating hyperplane in an induced higher dimensional feature space.*

Neal teaches *a confidence level of the selected examples, the confidence level being inversely proportional to a distance of a new feature of the selected examples* (col. 11, lines 1-47; Neal teaches a classification confidence score which determines the level of confidence in which a category is likely to be correct during classification. If the item has a high confidence, then it can be classified directly. If the confidence level is low the results can be sent to the user interface for review and selection by the operator. Using the broadest reasonable interpretation, the Examiner has determined that the “confidence level” as taught by Neal is analogous with the “ambiguity level” of the current invention. Thus a high confidence score is inversely proportional to distance of the new feature, which determines whether or not to automatically classify the item/category).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Stubler and LeBrun with Neal for the benefit of comparing confidence scores of items for all selected classifications and classifying the items based on confidence score comparison (col. 2, lines 36-42).

Toyama teaches *a distance of a new feature of the selected examples from a separating hyperplane in an induced higher dimensional feature space* (col. 5, line 47- col. 6, line 50; Toyama teaches a SVM classifier by identifying a hyperplane that separates a set of positive and negatives examples with a maximum margin. As Applicant disclosed within the specification (0008), for SVM classifiers the distance of an unlabeled data-point from the separating hyperplane in the high dimensional feature space could be taken as a measure of uncertainty (alternatively, a measure of confidence in classification) of the data-point. Therefore Toyama teaches a distance of a new feature of the selected examples from a separating hyperplane in an induced higher dimensional feature space. Toyama further teaches the quality of the learned classifiers for aesthetic image judgment can be enhanced by inputting to the feature selection procedures that are useful for distinguishing different aesthetic among images. Using the broadest reasonable interpretation, the Examiner has determined that the "aesthetic score" as taught by Neal is analogous with the "confidence level" of the current invention.

Using the broadest interpretation, the Examiner concludes at the time of the invention, one of ordinary skill of the art could modify Neal's teaching with Toyama

teaching of enhancing the learned qualifier in such a way that wherein the at least one criterion includes a confidence level of the selected examples, the confidence level being inversely proportional to a distance of a new feature of the selected examples from a separating hyperplane in an induced higher dimensional feature space.).

Therefore at the time of the invention it would have been obvious to one of ordinary skill in the art to combine Toyama with Stubler, LeBrun and Neal for the benefit of generating a set of images for input into a SVM classifier (col. 1, lines 57-64).

Note

It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the reference should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP 2123.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. A new ground(s) of rejection is made in view of Stubler, LeBrun, Lennon, Lipson, Neal, Toyama and Chino.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James J. Debrow whose telephone number is 571-272-5768. The examiner can normally be reached on 8:00-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAMES DEBROW
EXAMINER
ART UNIT 2176

/Doug Hutton/
Doug Hutton
Supervisory Primary Examiner
Technology Center 2100